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Discussion paper

Options for the political phase of the Global Stocktake

by:

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Abstract: Options for the political phase of the Global Stocktake

The first global stocktake (GST) under the Paris Agreement will be concluded at the end of 2023, and Parties and non-Party stakeholders are invited to submit their views on the approach to its final phase. The political phase of the GST could be organised by thematic area as defined by the GST, i.e., covering mitigation (including response measures); adaptation (including loss and damage); and finance flows, means of implementation and support. Alternatively, the political phase could be structured by sector.

Both options are suitable for, inter alia, engaging non-Party stakeholders, taking into account equity and the best available science and incorporating the results of the technical phase of the GST. Organising the political phase by thematic area possibly facilitates high-level participation and visibility, while organising this phase by sector may facilitate the information of Parties in enhancing their NDCs in specific sectors.

For the outputs of the GST, several options are possible, including the cover decision, political declarations or sectoral commitments, one or several CMA decisions, and a technical annex. Several of these options can be combined. A CMA decision, combined with a technical annex and sectoral commitments, may be most suitable for conveying specific, practicable guidance on enhancing ambition and implementation.

Kurzbeschreibung: Optionen für die politische Phase der Globalen Bestandsaufnahme

Die erste Globale Bestandsaufnahme (Global Stocktake – GST) im Rahmen des Übereinkommens von Paris wird Ende 2023 abgeschlossen, und die Vertragsparteien und nichtstaatlichen Akteure wurden aufgefordert, ihre Ansichten über das Vorgehen in der Schlussphase der GST vorzulegen. Die politische Phase der GST könnte nach den von der GST festgelegten Themenbereichen organisiert werden, d. h. Minderung (einschließlich Gegenmaßnahmen), Anpassung (einschließlich Verluste und Schäden) sowie Finanzflüsse, Mittel zur Umsetzung und Unterstützung. Alternativ könnte die politische Phase nach Sektoren strukturiert werden.

Beide Optionen eignen sich unter anderem dazu, nichtstaatlichen Akteure einzubeziehen, die Themen Gerechtigkeit und beste verfügbare Wissenschaft zu berücksichtigen und die Ergebnisse der fachlichen Phase der GST einzubeziehen. Wird die politischen Phase nach Themenbereichen organisiert, so erleichtert dies möglicherweise eine hochrangige Beteiligung und Sichtbarkeit, während die Organisation dieser Phase nach Sektoren die Information der Vertragsparteien über die Verbesserung ihrer NDCs in spezifischen Sektoren erleichtern kann.

Für die Ergebnisse der GST sind mehrere Optionen möglich, darunter die Mantelentscheidung, politische Erklärungen bzw. sektorale Verpflichtungen, ein oder mehrere CMA-Beschlüsse sowie ein technischer Anhang. Mehrere dieser Optionen können miteinander kombiniert werden. Ein CMA-Beschluss in Kombination mit einem technischen Anhang und sektoralen Verpflichtungen ist möglicherweise am besten geeignet, um spezifische, praktikable Leitlinien zur Steigerung der Ambitionen und der Umsetzung zu liefern.

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List of abbreviations

AFOLU	Agriculture, Forestry and Other Land Use
AILAC	Independent Alliance of Latin America and the Caribbean (Asociación Independiente de Latinoamérica y el Caribe)
AOSIS	Alliance of Small Island States
BTR	Biennial Transparency Report
CCXG	Climate Change Expert Group
СМА	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
СОР	Conference of the Parties
G7	Group of Seven
G20	Group of Twenty
GHG	Greenhouse gas
GST	Global Stocktake
ΙCAO	International Civil Aviation Organization
IEA	International Energy Agency
IGST	Independent Global Stocktake
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
IPPU	Industrial Processes and Product Use
LDCs	Least Developed Countries
LMDC	Like-Minded Developing Countries
LT-LEDS	Long-term low greenhouse gas emission development strategy
LTS	Long-term strategy
ΜΟΙ	Means of Implementation
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
РССВ	Paris Committee on Capacity-building
SB	Subsidiary Body
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

Summary

The first Global Stocktake (GST) under the Paris Agreement will be concluded in 2023 with its political phase. The consideration of outputs will take place during the COP28 climate change conference in November and December 2023, but political events with relevance for the GST also include meetings of the G7 and G20 and the United Nations Secretary General's Climate Ambition Summit in September. In order to inform the preparation for the consideration of outputs, Parties and non-Party stakeholders are invited to submit their views on the approach to this phase.

This paper discusses two options for the process of the political phase. This phase could be organised by thematic area as defined by the GST, i.e., covering mitigation (including response measures); adaptation (including loss and damage); and finance flows, means of implementation and support. Alternatively, the political phase could be structured by sector, with specific guiding questions, meetings and tailored outputs separately for each sector.

Both options are suitable for engaging non-Party stakeholders, for taking into account equity and the best available science, for ensuring high-level participation and visibility and for incorporating the results of the technical phase of the GST. Organising the political phase by thematic area possibly facilitates high-level participation and visibility and follows the structure of the technical dialogues under the GST, while organising this phase by sector possibly facilitates the information of Parties in enhancing their NDCs, and international cooperation, in specific sectors.

For the outputs of the GST, several options were identified, including the cover decision, political declarations or sectoral commitments, one or several CMA decisions, and a technical annex. These options are non-exclusive, and several of them can be combined. A CMA decision, combined with a technical annex and sectoral commitments may be most suitable for addressing Parties and non-Party stakeholders with specific, practicable guidance on enhancing ambition and implementation.

Zusammenfassung

Die erste Globale Bestandsaufnahme (Global Stocktake – GST) im Rahmen des Übereinkommens von Paris wird 2023 mit ihrer politischen Phase abgeschlossen. Die Prüfung der Ergebnisse wird während der Klimakonferenz COP28 im November und Dezember 2023 stattfinden. Daneben sind für die politische Phase die Treffen der G7 und der G20 sowie der Klimagipfel des Generalsekretärs der Vereinten Nationen im September von Bedeutung. Um die Erörterung der Ergebnisse vorzubereiten, wurden die Vertragsparteien und nichtstaatliche Akteure aufgefordert, ihre Ansichten über das Vorgehen in dieser Phase vorzulegen.

In diesem Papier werden zwei Optionen für den Ablauf der politischen Phase behandelt. Diese Phase könnte nach den von der GST definierten Themenbereichen organisiert werden, d. h. Minderung (einschließlich Gegenmaßnahmen), Anpassung (einschließlich Verluste und Schäden) sowie Finanzflüsse, Mittel zur Umsetzung und Unterstützung. Alternativ könnte die politische Phase nach Sektoren strukturiert werden, mit spezifischen Leitfragen, Besprechungen und auf den jeweiligen Sektor zugeschnittenen Ergebnissen.

Beide Optionen sind geeignet, um nichtstaatliche Akteure einzubinden, um die Themen Gerechtigkeit und beste verfügbare Wissenschaft zu berücksichtigen, um eine hochrangige Beteiligung und Sichtbarkeit zu gewährleisten und um die Ergebnisse der technischen Phase der GST einzubeziehen. Wird die politischen Phase nach Themenbereichen organisiert, so erleichtert dies möglicherweise eine hochrangige Beteiligung und Sichtbarkeit. Dies folgt auch der Struktur der fachlichen Dialoge im Rahmen der GST. Eine Organisation dieser Phase nach Sektoren erleichtert möglicherweise die Information der Vertragsparteien über die Verbesserung ihrer NDCs und die internationale Zusammenarbeit in spezifischen Sektoren.

Für die Ergebnisse der GST wurden mehrere Optionen identifiziert, darunter die Mantelentscheidung, politische Erklärungen bzw. sektorale Verpflichtungen, ein oder mehrere CMA-Beschlüsse sowie ein technischer Anhang. Diese Optionen schließen sich nicht aus, und mehrere von ihnen können miteinander kombiniert werden. Ein CMA-Beschluss in Kombination mit einem technischen Anhang und sektoralen Verpflichtungen ist möglicherweise am besten geeignet, um den Vertragsparteien und nichtstaatlichen Akteuren konkrete, praktikable Anleitungen zur Steigerung der Ambition und der Umsetzung zu liefern.

1 Introduction

The Global Stocktake (GST) under the Paris Agreement assesses the collective progress of Parties towards achieving the purpose of the Agreement and its long-term goals¹. In 2023, the technical phase of the first GST concludes at SB58 in June, and the consideration of outputs concludes its political phase during the COP28 climate change conference in December.

According to decision 19/CMA.1², the consideration of outputs 'will consist of high-level events where the findings of the technical assessment will be presented, and their implications discussed and considered by Parties'. The outputs of this component of the GST should 'identify opportunities for and challenges in enhancing action and support for collective progress'. They should also summarise key political messages, including recommendations arising from the high-level events, for strengthening action and enhancing support. These outputs should be referenced in a CMA decision and/or a declaration.

During the COP27 climate change conference in Sharm El-Sheikh in November 2022, the SBSTA and the SBI acknowledged the need to prepare for the consideration of outputs component of the first Global Stocktake, and they invited submissions by 15 February 2023 on views on the approach to this component³.

The SBSTA and the SBI also requested their chairs to hold an intersessional consultation, in a hybrid format, in April 2023 on preparations for the consideration of outputs component, taking into account these submissions. In addition, the chairs were requested to convene an intersessional in-person workshop in October 2023 to develop elements for this component.

The call for submissions by 15 February 2023 provides an opportunity for Parties to suggest ways how the consideration of outputs should be organised, and how these outputs should be designed. This paper discusses options for the organisation of the political phase, and options for the design of its outputs. This is done on the basis of various technical and scientific papers and submissions which address procedural aspects of the GST.

Chapter 2 lists the literature and submissions which were used in the analysis. The main messages from these sources can be found in the appendix. In chapter 3, two options for the process of the political phase are discussed, based on suggestions made in this literature. Chapter 4 presents and discusses several options for the outputs. Conclusions are drawn in chapter 5.

¹ Paris Agreement, Article 14.1, <u>https://unfccc.int/documents/37107</u>

² Decision 19/CMA.1 – Matters relating to Article 14 of the Paris Agreement and paragraphs 99-101 of decision 1/CP.21, pages 53 to 58 of the addendum to the report of the CMA. https://unfccc.int/documents/193408

³ Matters relating to the global stocktake under the Paris Agreement. Draft conclusions proposed by the Chairs, <u>https://unfccc.int/documents/622369</u>

2 Papers addressing the political phase of the Global Stocktake

For this paper, the reports and submission listed below were analysed. More information, including relevant messages of the various reports and submissions, is provided in the appendix.

- > Designing a meaningful Global Stocktake (Rajamani et al. 2022), cf. Appendix A.1
- Translating outputs to outcomes under the global stocktake of the Paris (Jeudy-Hugo and Charles 2022), cf. Appendix A.2
- ▶ How to organise a Global Stocktake that enhances national climate action and international cooperation (Pérez Català et al. 2022), cf. Appendix A.3
- Adaptation in the global stocktake: options to deliver on its mandate (Jeudy-Hugo et al. 2022), cf. Appendix A.4
- Assessing the adequacy of the global response to the Paris Agreement: Toward a full appraisal of climate ambition and action (Gunfaus and Waisman 2021), cf. Appendix A.5
- Preparing for the first global stocktake: How to shift collective climate action into high gear and achieve equitable outcomes (Winkler and Marquard 2021), cf. Appendix A.6
- ► The Challenges of Assessing "Collective Progress" Design Options for an effective Global Stocktake process under the UNFCCC (Jeffery et al. 2021), cf. Appendix A.7
- Maximising the impacts of the Global Stocktake: Options for design and implementation (Beuermann et al. 2021), cf. Appendix A.8
- What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals? (Huang 2018), cf. Appendix A.9
- Submissions by Parties and observer organisations that address the process and outputs of the political phase of the Global Stocktake⁴, cf. Appendix A.10

⁴ UNFCCC submission portal, <u>https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx</u>

3 Options for the process of the political phase

3.1 Provisions for the political phase

Paragraph 33 of decision 19/CMA.1 specifies that the consideration of outputs will consist of high-level events where the findings of the technical assessment will be presented, and their implications discussed and considered by Parties. These events will be chaired by a high-level committee consisting of the presidencies of the CMA and the chairs of the subsidiary bodies. Apart from guidance on the outputs of this phase in paragraph 34 of decision 19/CMA.1, which are discussed in section 4, no additional specifications are provided by the CMA.

In their conclusions of November 2022 on matters relating to the Global Stocktake, the SBSTA and SBI invited submissions by 15 February 2023 on views on the approach to the consideration of outputs component. They also requested the SBSTA and SBI chairs to hold a consultation in April 2023 on preparations for this component, and a workshop in October to develop elements for this component. The SBSTA and SBI invited the high-level committee to provide an update on progress in planning the high-level events during the June 2023 subsidiary bodies session. According to paragraph 7 of decision 19/CMA.1, the SB chairs will provide guiding questions for the consideration of outputs phase.

3.2 Suggestions made in the literature and in submissions

For the process and elements of the political phase, which will be discussed during 2023, various suggestions have already been put forward. In the papers and submissions listed in chapter 2, the following main suggestions were made related to the process of the political phase:

- Gunfaus & Waisman (2021) suggested to structure the political phase according to sectors.
- Jeudy-Hugo et al. (2022a), the Least Developed Countries (LDCs) and others addressed the engagement of non-Party stakeholders. The LDCs mentioned lessons from past practices undertaken in regional meetings, the Technical Examination Process and the work of climate champions to facilitate engagement of stakeholders.
- In the submission by the iGST, it was suggested to spread the high-level events throughout the two weeks of the COP, namely, to organise a high-level dialogue between Parties and stakeholders to discuss the implications of the findings of the technical assessment, and to discuss the reports produced from the technical dialogue in dedicated high-level events.
- Pérez Català et al. (2022) suggested that the GST should unfold discussions around systemic transformations and their international enablers. Enablers can be national or international and happen in different areas, including finance, technological innovation, strengthening policy instruments, institutional capacity, multi-level governance and changes in human behaviour and lifestyles. At the international level, the discussion should be also around current barriers for implementation of systemic mitigation and adaptation transformations. The authors stress the link between the international and national level explaining that the process of translating national transformations into opportunities for international cooperation and exchanges on best practices through national and international discussions can support increases in national climate ambition. That involves, however, that international climate dialogues organise discussions around sectoral and systemic transformations and related enablers.

3.3 Suggested options for the process of the political phase

Based on these suggestions, we identified the following main options for the process of the political phase of the GST:

- Option A: Organise the political phase by thematic area: (1) Mitigation (including response measures); (2) adaptation (including loss and damage); (3) finance flows, means of implementation and support. There would be specific guiding questions, meetings and tailored outputs separately for each thematic area.
- ▶ **Option B**: Organise the political phase of the GST by sector: There would be specific guiding questions, meetings and tailored outputs separately for each sector.

Option A follows the structure of the technical dialogues under the GST. It would allow for engaging non-Party stakeholders as suggested, inter alia, by Jeudy-Hugo et al. (2022a) and for discussing systemic transformations and enablers as suggested by Pérez Català et al. (2022).

Option B is based on the suggestion by Gunfaus & Waisman (2021). Like option A, option B would also allow for engaging non-Party stakeholders, and it would allow for discussing systemic transformation and enablers. A sectoral approach could break down the information collected during the GST into pieces which may be easier to manage for Parties and for enablers.

3.4 Discussion

Options A and B have specific advantages and disadvantages. In the following, we briefly discuss whether option A and/or option B is well placed to:

- effectively engage non-Party stakeholders;
- take into account equity and the best available science;
- ensure balanced high-level participation and visibility of the discussions;
- ensure that the results of the technical phase effectively inform the political phase;
- ensure that the outcomes can be linked to other processes under the Paris Agreement;
- ▶ inform Parties in enhancing their NDCs; and
- enhance international cooperation on climate action.

As far as the **engagement of non-Party stakeholders** is concerned, **option B** has the advantage that many stakeholders (NGOs, intergovernmental organisations such as the IEA and some UN specialised agencies such as IMO and ICAO) focus on a specific sector, such as energy, industry or agriculture, rather than on a thematic area. However, some stakeholders also focus on one thematic area, such as adaptation or support, which would make it easier for them to be involved under **option A**.

According to Article 14.1 of the Paris Agreement, the GST shall assess collective progress in the light of **equity and the best available science**. Equity is a cross-cutting topic and goes beyond specific sectors, which suggest that **option A** may be better placed to address equity. Both **option A** and **option B** allow for the consideration of the best available science; there are no major difference between these options.

As far as **high-level participation** and **visibility** of the discussions is concerned, **option A** has the advantage that the broad thematic areas mitigation, adaptation and means of

implementation may be more attractive and easier to contribute to for high-level participants, and easier to generate visibility. In addition, the discussions under GST were already structured along these thematic areas. On the other hand, high-level participants such as sectoral ministers are also available for **option B**.

The **technical phase** of the GST is mainly organised along thematic areas. Hence, **option A** may be more suitable for taking up the results of the technical assessment component, particularly when we consider that the consideration of outputs 'will consist of high-level events where the findings of the technical assessment will be presented and their implications discussed and considered by Parties'⁵. For **option B**, it would be important that the results of the technical phase are available in a format that allows for structuring them along sectors.

The GST cannot be seen in isolation. In order to facilitate progress towards the three goals of the Paris Agreement, a mitigation work programme and a work programme on the global goal on adaptation have been established at COP26. In addition, a dialogue on the scope of the 'finance flows' goal has been established at COP27. These three processes roughly correspond to the three main thematic areas of the GST. Hence, **Option A** could provide for an easier linking of the GST outputs to these ongoing processes. As far as the informing of Parties in **enhancing their NDCs** is concerned, the majority of NDCs focus on mitigation and many have adaptation components. Many also address means of implementation and support needed. **Option A** would provide outputs which are structured along these main topics. However, organising the outputs along these broad topics could make it more difficult to convey actionable solutions particularly at the national level. As far as the increase of mitigation ambition (and also the enhancement of the adaption component) is concerned, it would be helpful if the outputs of the political phase were structured by sector and provided specific sectoral guidance. Hence, we consider that **option B** would be more suitable for informing Parties in enhancing their NDCs.

International cooperation on climate action can be roughly categorized into mitigation, adaptation and support. A political phase organised along these thematic areas could be well placed to help enhance international cooperation. However, in practice these areas are interlinked (e.g. when support is provided for adaptation actions with mitigation co-benefits). International cooperation often addresses very specific sectors (e.g. support projects for the decarbonisation of the electricity sector). Hence, **option B** may be more suitable for enhancing international cooperation.

⁵ Decision 19/CMA.1 paragraph 33 – Matters relating to Article 14 of the Paris Agreement and paragraphs 99-101 of decision 1/CP.21, pages 53 to 58 of the addendum to the report of the CMA, <u>https://unfccc.int/documents/193408</u>

4 Options for the outputs

4.1 **Provisions for the outputs**

According to paragraph 34 of decision 19/CMA.1 the outputs of the political phase of the Global Stocktake should 'identify opportunities for and challenges in enhancing action and support [...], as well as possible measures and good practices and international cooperation and related good practices'.

In addition, the outputs should summarize key political messages for strengthening action and enhancing support and should be referenced in a decision for consideration and adoption by the CMA and/or a declaration. Decision 19/CMA.1 does not include further provisions for the format of these outputs.

4.2 Suggestions made in the literature and in submissions

In the papers listed in chapter 2, various suggestions were made on the format and contents of the outputs:

- Several papers discussed the formats and contents of a CMA decision and a political declaration⁶. More specifically, Rajamani et al. (2022) distinguished between the cover decision, linked dedicated decisions on the Global Stocktake, technical annexes, and a political declaration. As a specific example, the outputs could include, according to Rajamani et al. (2022), recommendations and roadmaps for how sectoral decarbonisation targets could be achieved.
- According to Jeudy-Hugo et al. (2022a) the outputs could include recommendations of possible follow-up actions by Parties, UNFCCC processes and relevant bodies and non-Party stakeholders.
- Beuermann et al. (2021) pointed out that Parties could use the Global Stocktake to send a signal to other intergovernmental institutions, including ICAO and IMO. The outputs could include global sector performance benchmarks, and Parties could mandate follow-up processes at the regional level and encourage national level conversations to translate the collective messages from the GST into actionable and sector-specific policy recommendations.
- Pérez Català et al. (2022) suggested that the Global Stocktake should take stock of the implementation of international enablers of transformations required for Paris-compatible pathways. International enablers should then be pointed out, alongside the actions required to leverage these enablers. Related to this, Gunfaus & Waisman (2021) suggested that the Global Stocktake should be designed so as to provide for a systematic assessment of transformation challenges and barriers.

A detailed overview of the suggestions of these papers in relation to the political phase is provided in the Appendix.

⁶ It was specified in paragraph 34 of decision 19/CMA.1 that the outputs should be referenced in a decision for consideration and adoption by the CMA and/or a declaration.

4.3 Suggested topics for the outputs

Based on these suggestions, we identified the following main options for the output of the GST. These options are non-exclusive, and several of them can be combined:

- **Option 1**: The outputs of the GST are included in the cover decision.
- **Option 2**: Political declaration (at the ministerial or head of state and government level, to be referenced in the CMA cover decision).
- Option 3: High level sectoral commitments by progressive Parties and non-Party stakeholders in the context of campaigns by the COP presidency or in the context of the Climate Action Agenda.
- **Option 4a**: Specific CMA decision on the GST.
- **Option 4b**: Several CMA decisions, organised by sector or by main topic of the GST.
- **Option 5**: Technical annex with detailed information, organised by sector or thematic area.

4.4 Discussion

As mentioned above, paragraph 34 of decision 19/CMA.1 states that the outputs of the GST should summarize key political messages for strengthening action and enhancing support and should be referenced in a decision for consideration and adoption by the CMA and/or a declaration.

As such, **two main functions of the outputs** can be deducted in light of the GST mandate: First, the outputs should contribute to **sharing knowledge** between the Parties, identifying best practices and barriers as well as opportunities and challenges to enhance action and support. Therefore, the information and knowledge presented in the outputs has to be displayed in an accessible way which also ensures that it has the necessary depth of information.

Second, the outputs should also **create momentum** among Parties and non-Party stakeholders to enhance 'collective ambition and support towards achieving the purpose and long-term goals of the Paris Agreement' (Decision 19/CMA.1). In this regard it is important to have high-level backing for the outputs such as through the inclusion in the **CMA cover decision**, either directly or through the **reference to a high-level political declaration**. In order to simultaneously ensure that the outputs have the necessary depth in terms of sharing knowledge, the reference to a **technical annex** in the cover decision might be a good way to meet both functions. This technical annex could then provide detailed information and could be organised by sectors or thematic areas such as areas of systemic transformation including their enablers and barriers.

Alternatively, there could be several **CMA decisions on each sector or area of systemic transformation**. This would on the one hand ensure that all sectors or areas of systemic transformation would probably get more attention than in a technical annex. However, it is most certainly more complicated and time-consuming to agree on several CMA decisions, than to provide all the information in a technical annex. Furthermore, this process bears the risk that less information reaches the various CMA decisions, although this process of discussing specific CMA decisions might also positively contribute to the function of sharing knowledge.

As far as the **contents** of the outputs are concerned, they will likely include:

statements on the collective progress made so far;

- statements on the urgent need to increase ambition; and
- > guidance for Parties and stakeholders on increasing ambition and implementation.

Statement on the collective progress could include an overview of progress for covering the three main thematic area and addressing, for example, gaps, success stories, and uneven progress across Parties. Such statements can be made in the cover decision (**option 1**) or in specific CMA decisions (**options 4a and b**). They can be supported by additional information in a technical annex (**option 5**).

Statements on the need to increase ambition may refer to the IPCC Sixth Assessment report, in particular to its working group II and III contributions, and they may address the need for transformative action and may specify potential action. Such statements could ideally form part of a political declaration (**option 2**) at ministerial or heads of state and government level in order to give them as much political weight as possible. The combination of such statements with a political declaration would allow to link information on current gaps with commitments to address and reduce these gaps.

Statements on the need to increase ambition could also be made at a sectoral level and include sectoral commitments (**option 3**) by specifying the emissions gap, identifying emission targets for 2030 and 2050, and ideally also targets/benchmarks for individual sectors, etc. At the sectoral level, they could also include the advancement or strengthening of existing commitments or initiatives and advance on issues negotiated for inclusion in cover decisions of previous COPs, such as coal/fossil fuel phase-down, fossil subsidy phase-out, expansion of efficiency and renewable energies.

If the outputs do include a political declaration, the CMA decision on the GST could focus on the process, e.g. reflect on how the GST has been conducted and derive lessons for future GSTs. If there is no political declaration, the high-level messages discussed in the previous two paragraphs should be included in the cover decision (**option 1**) rather than a GST-specific decision (**options 4a and 4b**) since the cover decisions usually gain the most political and public attention.

Guidance on increasing ambition and implementation could address the updating of NDCs, namely, facilitate the communication of more ambitious targets by Parties. It could also provide benchmarks and address equity aspects in ambition and implementation. Such guidance could focus on the implementation by sector and include, e.g., good practice examples, challenges and how to address them. It could also address specific stakeholders, including Parties, multilateral organisations and NGOs. Such guidance could be included in one or several GST-specific CMA decision(s) (options 4a and b) and supported by a technical annex (option 5). For this guidance to be effective, it will be important to address barriers and opportunities which were identified during the technical phase of the GST, and to point out enablers for overcoming these barriers. Such guidance should be sector-specific and cover the thematic areas of mitigation, adaptation and means of implementation/support.

In addition, the guidance should address all stakeholders and sectors that can contribute to meeting the goals of the Paris Agreement. These include, inter alia, non-governmental organisations, local governments, intergovernmental organisations, and sectors such as international shipping and aviation, which are not covered explicitly by the Paris Agreement and may not be addressed adequately at the national level.

The challenge will be to address a wide range of actors with guidance that is as specific as possible, but still practicable and can be agreed within the limited time available during the political phase of the GST. Careful preparation for the final phase of the GST is therefore

particularly important. The intersessional consultations scheduled for April, the subsidiary bodies meeting in June and the intersessional workshop in October 2023 will provide opportunities to develop the consideration of outputs phase.

A combination of a GST-specific CMA decision and technical annexes may be a suitable approach for these outputs. Some outcomes of particular political importance could be highlighted in the cover decision, and the CMA decision may be complemented by sectoral commitments. Non-Party stakeholders could be involved in the development of such commitments, and they could contain specific commitments for increased ambition. Parties could sign on to commitments for specific sectors which they could follow when preparing their new NDCs.

5 Conclusions

In this paper, two options for the process of the political phase of the GST were discussed. This phase could be organised by thematic area, i.e., covering mitigation (including response measures), adaptation (including loss and damage) and finance flows, means of implementation and support. Secondly, the political phase could be organised by sector, with specific guiding questions, meetings and tailored outputs separately for each sector.

For these two options on the process, it was discussed how non-Party stakeholders can be engaged effectively, how equity and the best available science can be taken into account, how to ensure balanced high-level participation and visibility of the discussion, how the results of the technical phase can inform the political phase, and how international cooperation on climate action can be enhanced. Overall, both options were found to be suitable, with an organisation by thematic area possibly facilitating high-level participation and visibility, and an organisation by sector possibly facilitating the information of Parties in enhancing their NDCs, and international cooperation, in specific sectors.

For the outputs of the GST several options were identified, including a cover decision, political declarations or sectoral commitments, one or several CMA decisions, and a technical annex. These options are non-exclusive, and several of them can be combined.

For these options on the output, it was discussed how they can contribute to the functions of sharing knowledge between Parties and of creating momentum to enhance ambition and implementation. The various options were also discussed with respect to the main contents of the outputs, namely statements on the collective progress, statements on the urgent need to increase ambition, and guidance to Parties and stakeholders. There are several combinations of outputs which can convey these contents. A GST-specific CMA decision, combined with a technical annex and sectoral commitments may be most suitable for addressing Parties and non-Party stakeholders with specific, practicable guidance for enhancing ambition and implementation.

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A Appendix: Main messages from reports and submissions

A.1 Rajamani et al. (2022): Designing a meaningful Global Stocktake

https://www.c2es.org/document/designing-a-meaningful-global-stocktake/

This report focuses of the outputs of the GST, rather than on the process of the political phase.

- The choice of form of the outputs should be guided by the extent of visibility needed to achieve the required impact, its intended audience, and the signals sought to be delivered to state and non-Party actors in the wider landscape.
- At a minimum the outputs must connect technical debates on past achievements and experiences with the national political processes related to NDC development. Options that require consensus-based decision-making might command greater legitimacy and instill a sense of ownership among all the Parties.
- However, these may not lend themselves to impactful conclusions and signals. Options for outputs include one or more of the following:
 - CMA decisions, both cover decisions (1/CMA.5) and linked dedicated GST decisions;
 - CMA decisions, with technical annexes listing specific opportunities for enhanced climate action across sectors, issue areas and in relation to each of the long-term goals identified in the Paris Agreement;
 - political declarations, at the ministerial or head of state level, which could be taken by consensus among all the Parties or a sub-set of Parties to the Paris Agreement (e.g., Geneva Ministerial Declaration, 1996; Copenhagen Accord, 2009).
- Outputs of the GST providing an impulse to the wider governance landscape
- The GST output could address the wider climate governance landscape as a whole, for example by highlighting:
 - the urgent need and ample opportunity to maximize emission reductions, resilience efforts, and support across sectors and themes, including through advancing and strengthening existing initiatives and efforts as well as instigating new ones;
 - the need and opportunity to enhance the accountability and transparency of relevant initiatives and efforts in order to ensure their effectiveness and impact.
- The GST output could also specifically address key sectors/themes, for example identifying specific good/best practices, gaps, and potential in selected sectors and around specific themes (possibly to be reflected in technical annexes to the output.
- The outputs of the GST could include announcements of key new initiatives and updates of existing ones to address identified gaps and potentials.
- The GST output could highlight the importance of sectoral/thematic granularity of climate action more generally, beyond the wider landscape.

A.2 Jeudy-Hugo et al. (OECD) (2022a): Translating outputs to outcomes under the global stocktake of the Paris Agreement

https://www.oecd.org/publications/translating-outputs-to-outcomes-under-the-globalstocktake-of-the-paris-agreement-e06c61f0-en.htm

This paper discusses possible elements of GST outputs, including recommendations for possible follow-up actions.

"A successful GST would be one that achieves its agreed outcome set out in the Paris Agreement to "inform Parties in updating and enhancing, in a nationally determined manner, their actions and support..., as well as enhancing international co-operation for climate action". This intended outcome of the process could be linked to further tangible and intangible outcomes, such as providing guidance to Parties on aligning Nationally Determined Contributions (NDCs) with Long-Term Low Emission Development Strategies (LT-LEDS), and increasing awareness of opportunities to address the gaps in implementing the goals of the Paris Agreement. How to reach the desired outcomes of the GST is critical but not straightforward."

"Effectively engaging all Parties in the process could help to strengthen ownership of GST outputs and could facilitate subsequent follow-up by Parties in informing updates to national actions and support. Similarly, active engagement by non-Party stakeholders throughout the process could strengthen ownership and facilitate subsequent follow-up to enhance international co-operation for climate action."

"This paper identifies different elements which could encourage Parties and non-Party stakeholders to consider GST recommendations in their work going forward and provide a future marker against which to assess GST1. Potential elements of the final package of outputs include:"

- "Technical information e.g. technical annexes setting out mitigation, adaptation, means of implementation and support opportunities in key sectors or thematic areas, linking to on-going initiatives such as the Breakthrough Agenda, the Climate Action Pathways of the Marrakech Partnership, or sectoral initiatives launched at COP26."
- "Recommendations of possible follow-up actions by Parties, UNFCCC processes and relevant bodies - e.g. Parties could indicate how subsequent NDCs have been informed by GST outcomes; relevant bodies such as the Paris Committee on Capacity-building (PCCB), could be directed towards supporting implementation of GST recommendations; technical expert reviews of biennial transparency reports (BTRs) could consider if information has been provided on how the GST has been taken into account; new work programmes on mitigation and adaptation could be designed to complement the GST and potentially carry forward GST1 recommendations post-2023; the UNFCCC secretariat could prepare a report on lessons learnt from GST1 to inform GST2."
- "Recommendations of possible follow-up actions by non-Party stakeholders e.g. Regional Climate Weeks could include sessions on the GST during the process and after it has been concluded; non-Party stakeholders could incorporate GST outputs in their work, e.g. to support NDC planning and implementation processes or to take forward relevant sectoral initiatives."
- "Dedicated support to assist countries in strengthening domestic enabling environments could help to facilitate the translation of GST outputs into outcomes at the national level, taking into account national circumstances and starting points."

- "Leveraging "political moments" and building linkages with parallel processes, within and outside the UNFCCC context, can help to maintain attention and pressure around the GST to ensure operational action follows over time.(...)".
- "Decision 19/CMA.1 outlines a mix of technical and political outputs across the three components of the GST (...). The format and content of some of these outputs, including their level of aggregation or disaggregation, have not yet been finalised. Different types of outputs can play different roles depending on the intended audience and purpose."

The agreed outcome of the GST could be linked to further tangible ("hard") and intangible ("soft") outcomes as set out below: Further tangible outcomes could include:

- Providing guidance to Parties on developing LT-LEDS and aligning these with NDCs: Beyond its role in informing the subsequent round of NDCs, the GST could help increase understanding of long-term climate pathways (e.g. to net-zero) and climate impacts which could provide guidance to Parties in the development or revision of their LT-LEDS and alignment with NDCs.
- Identifying knowledge gaps in key areas for the research and scientific community to address: Decision 19/CMA.1 includes a provision for SBSTA and SBI to identify potential information gaps relating to the GST and request additional input where necessary or feasible. A further outcome of the GST could thus be its role in identifying knowledge gaps in key areas. The GST process could also be useful in strengthening partnerships between experts and organisations who could then work to close the identified gaps.

Refining the modalities of subsequent GSTs based on experiences: Decision 19/CMA.1 includes a provision for learning-by-doing, including in the assessment of collective progress. This ability to incorporate learning and improve future processes will be important for maintaining the effectiveness and relevance of the GST going forward. Further intangible outcomes could include:

- Strengthened political willingness to act on climate across all areas of the Paris Agreement. By engaging all Parties and different non-Party stakeholders throughout the process, the GST could help to create a sense of ownership among participants in the process and subsequent outputs. This could in turn help to build trust among different actors and facilitate further political momentum behind climate action across different areas of the Paris Agreement.
- Increased understanding of available opportunities for addressing the gaps towards the goals of the Paris Agreement: The GST has the potential to reach a broader audience beyond the UNFCCC process and could help to increase understanding among different actors of available opportunities to plug current gaps towards the goals of the Paris Agreement. This would also support the agreed outcome of the GST of informing Parties in "enhancing" their national actions, as well as "enhancing international co-operation for climate action".
- Improved dialogue between Parties as well as with non-Party stakeholders. The technical dialogues, joint contact groups and high-level events planned under the GST (as well as events organised outside the formal GST process) will provide a space for dialogue and exchange among different actors. These interactions can help to improve understanding of the priorities and concerns of actors from different countries and regions and engage in a dialogue on lessons learned and opportunities for enhancing action.
- "The formulation of the final package of GST outputs can play a critical role in facilitating subsequent follow-up by different actors and in reaching desired outcomes of the GST. This

includes the focus, level of aggregation/disaggregation, clarity, accessibility and detail of GST outputs."

- "On the potential focus of GST outputs there is growing recognition of the near-term implementation gap and the need to urgently scale up climate action to meet the goals of the Paris Agreement (...) To add value in this context, GST1 could start from the basis that there is a gap and focus on how to plug this gap, and identify specific opportunities to do so."
- "On the potential level of aggregation/disaggregation of GST outputs how the GST process and outputs are organised (e.g. by sector or thematic area) could influence subsequent followup. For example, a sectoral approach which reveals collective gaps in different sectors and identifies potential opportunities to plug identified gaps could help facilitate take-up by non-Party stakeholders."

Element	Detail	Target actors
Technical Information	Technical annexes to the outputs from the 'Technical assessment' component could set out opportunities in different sectors, identify drivers and barriers for accelerating ambition, potential options that could be scaled up and replicated, links to new/existing initiatives such as the Breakthrough Agenda, Climate Action Pathways of the Marrakech Partnership, efforts to take forward sectoral initiatives launched at COP26.	Parties and non- Party stakeholders
Recommendations of possible follow- up actions by Parties, UNFCCC processes and relevant bodies	Parties could be "invited" to indicate how subsequent NDC submissions have been "informed" by the outcome of the GST, in line with Article 4.9 of the Paris Agreement and guidance in Decision 4/CMA.1 to facilitate clarity, transparency and understanding of NDCs. There is a precedent in the outcome, inputs and outputs of the Talanoa Dialogue being referenced to in this way in Decision 1/CP.24 (UNFCCC, 2019[48]).	Parties
	Relevant bodies such as the Paris Committee on Capacity-building (PCCB), Technical Expert Groups, Consultative Bodies, etc. could incorporate GST recommendations in their work, e.g. prioritising capacity building to update NDCs, develop LT-LEDS, align NDCs and LT-LEDS, improve monitoring and data collection to inform subsequent GSTs.	Relevant bodies
	Relevant bodies such as the Paris Committee on Capacity-building (PCCB), Technical Expert Groups, Consultative Bodies, etc. could incorporate GST recommendations in their work, e.g. prioritising capacity building to update NDCs, develop LT-LEDS, align NDCs and LT-LEDS, improve monitoring and data collection to inform subsequent GSTs.	Financial Mechanism of the Convention
	Technical expert reviews of biennial transparency reports (BTRs) could consider whether a Party has reported information on if/how their NDC has been informed by the outcomes of the GST in line with Article 4.9 of the Paris Agreement and the guidance in Decision 4/CMA.1 to facilitate clarity, transparency and understanding of NDCs.	UNFCCC
	Activities under new work programmes on mitigation and adaptation could be designed to complement the GST process. If	COP Presidency and UNFCCC

 Table 1:
 Potential Elements of the final package of the GST outputs

Element	Detail	Target actors
	the work programmes are extended beyond their envisaged timeframe, they could become a platform to carry forward the outcomes of the GST in 2024-25 period.	
	UNFCCC secretariat could consider preparing a report on lessons learned from the GST1 process to be made available at COP29 to inform preparations for GST2.	UNFCCC
Recommendations of possible follow- up actions by non- Party stakeholders	Regional Climate Weeks could include sessions dedicated to discussing the GST and implications for climate policy implementation at the regional level.	UNFCCC and non-Party stakeholder
	Non-Party stakeholders could incorporate GST recommendations in their work, e.g. to support NDC planning processes in different countries, to implement relevant initiatives such as the Breakthrough Agenda, Climate Action Pathways of the Marrakech Partnership and efforts to take forward sectoral initiatives launched at COP26.	Non-Party stakeholders

Source: Jeudy-Hugo et al. (2022a), Table 6.3.

A.3 Pérez Català et al. (2022): How to organise a Global Stocktake that enhances national climate action and international cooperation

https://www.iddri.org/en/publications-and-events/policy-brief/how-organise-globalstocktake-enhances-national-climate-action

The paper contains recommendations for future iterations of the information collection phase and the Technical Dialogue as the current process is insufficient to strengthen the enablers for climate change mitigation and adaptation. Those enablers are defined as "conditions that enhance the feasibility of adaptation and mitigation options".

Introduction to the topic

- "An effective collective identification of enablers requires that countries, (...) discuss their current barriers for the implementation of systemic mitigation and adaptation transformations aligned with global carbon neutrality. This methodology can provide a strong link between the international discussion on the enablers and the political agenda in key countries."
- "Overall, the interactions that took place during the first Technical Dialogue were very constructive, but many highlighted the need to move from "what" the gaps are to "how" to close them, getting closer to identifying challenges, solutions and best practices." Closing the gaps will be one of the topics at the second Technical Dialogue held at COP27.

Problematizing the current process

 "However, despite these organisational changes, the current stocktake process could fall short of its objectives, as the World Cafés represent only a very small part of the whole Technical Dialogues, and keeping the usual "mitigation, adaptation and means of implementation" divide might make it more difficult to identify actionable solutions. We instead suggest that, instead, the GST unfolds discussions around systemic transformations and their international enablers."

- "National strategies, presented in revised LTSs and NDCs, are describing with more or less details how these system transformations take place in their country and gather elements on their related national and international enablers. These governmental analyses, and other analyses carried out by national actors, could provide relevant evidence for an international discussion. (...)"
- "At the global level, an effective collective identification of enablers requires that countries, informed by their LTS and related NDCs, discuss their current barriers for the implementation of systemic mitigation and adaptation transformations aligned with global carbon neutrality (Fazekas et al., 2022)."
- The authors stress the link between the international and national level explaining that the process of translating national transformations into opportunities for international cooperation and exchanges on best practices through national and international discussions has the potential to support increases in national climate ambition. Both national and international enablers can inform international climate dialogues and make national climate policies more ambitious: "However, this requires that the international climate dialogues organise discussions around sectoral and systemic transformations for global carbon neutrality and their related enablers. Second, once the transformations and their enablers have been identified, they should move to formulating concrete opportunities for international cooperation."
- The paper contains examples of key systemic transformations (such as the phasing out of fossil fuels) and their related international enablers.
- "To achieve its goals, we argue that the GST should take stock of the implementation of international enablers of transformations required for Paris-compatible pathways. International enablers should then be pointed out, based on country-led identification of net-zero pathways' transformations, alongside the actions required to leverage the enablers."

Recommendations

- "The Information Collection and synthesis should be organised around systemic transformations and their international enablers. (...) Therefore, the third round of the Technical Dialogues should be organised to discuss a) the necessary transformations; b) their national enablers (for experience sharing); and c) their international enablers, in order to come to agreements on the international collabo- ration necessary to leverage international enablers."
- "A stronger connection is needed between the roundtable discussions on mitigation and adaptation on the one hand, and means of implementation (MOI) on the other hand. Ideally, the mitigation and adaptation discussions should define the required transformations, which would give a clear agenda for the MOI roundtable, which could discuss the means required to implement the transformations defined in the other two streams, helping concretise and bring specific arguments to the MOI discussion. (...)"
- "(...) Operationalising these opportunities for (international) cooperation goes beyond the mandate of the GST. However, the GST could help identify the necessary high- level political negotiations in order to find an agreement that would probably entail sharing the risks of transition, sharing the negative or positive impacts or the benefits of these transformations. (...)"

A.4 Sirini Jeudy-Hugo, Sofie Errendal and Izumi Kotani (2022b): Adaptation in the global stocktake: options to deliver on its mandate. Climate Change Expert Group Paper No.2022(4)

https://t4.oecd.org/publications/adaptation-in-the-global-stocktake-396b5224-en.htm

The papers' focus is on the GST thematic area 'adaptation'. It discusses how the GST outputs can be designed to ensure effective follow-up actions by Parties and non-Party stakeholders.

- "How to reach the intended outcomes of the GST is critical but not easy. An important question is how to ensure follow-up, and to encourage Parties and non-Party stakeholders to consider GST recommendations in their work going forward. As highlighted in previous CCXG analysis, the focus, clarity, and format of the final package of GST outputs, and the participation of relevant stakeholders in their development, is key."
- "The final package of outputs from the 'Technical assessment' component and 'Consideration of outputs' component of GST1 could include different elements targeting different actors to facilitate subsequent follow-up." The elements presented in the paper include recommendations to Parties, recommendations to non-Party stakeholders, and technical annexes.

A.5 Gunfaus & Waisman (2021): Assessing the adequacy of the global response to the Paris Agreement: Toward a full appraisal of climate ambition and action

https://www.sciencedirect.com/science/article/pii/S2589811621000069

The paper points out the importance of structural transformations, socio-economic conditions and governance arrangements (in addition to GHG emission reductions), and the importance of organizing the GST at a sectoral level.

- "[...] four layers of analysis GHG emissions, structural transformations, socio-economic conditions and governance arrangement [...] can facilitate the design of possible new avenues for more rapid and effective transition."
- "We propose [...] key common attributes of our comprehensive adequacy framework: a sectoral approach to inform the economy-wide picture (sector granularity); a long-term perspective to inform short-term decisions (temporal alignment); and a country-driven vision to inform the global picture (multilevel alignment)."
- "The sectoral perspective on global climate governance proposed in this Special Issue should be understood in the context of the paradigm shifts underpinning the Paris Agreement, notably the recognition of the need for fundamental reconfigurations of economies and societies across developed and developing countries alike"
- "A prerequisite for appropriate adequacy assessments is having a clear picture of these transformation processes. This picture must be developed upfront with clear identification of global enablers of such transformations."
- "We have identified the need to further improve consideration of two additional challenges: the integration of multiple levels of governance and of short- and long-term time horizons."
- "The Global Stocktake should be designed so as to provide for a systematic assessment of transformation challenges and barriers."

- "This should be the basis for the development of sectoral roadmaps, which are essential to enhance the guidance and signal function of the international governance regime, as particularly emphasized with respect to the transport sector and energy intensive industries, or for addressing the global knowledge gap on 1.5 °C-consistent financial pathways and needs and financial decision-making criteria at portfolio and project level."
- "The Global Stocktake itself and all the assessments that will be conducted in the formal processes, as well as in independent analyses that will inevitably emerge in the leadup, needs to be (at least partly) organized as much as possible on a sectoral basis. Parties should design the Global Stocktake so as to create space for collective discussions at the required level of granularity."

A.6 Winkler & Marquart (2021) Preparing for the first global stocktake: How to shift collective climate action into high gear and achieve equitable outcomes. Konrad Adenauer Stiftung

https://www.kas.de/documents/282730/14348058/GST_KAS-Layout final 4.pdf

This paper provides an introduction to the themes of the GST and introduces question to be addressed during the GST for each theme, as well as questions for the GST process.

"The consideration of outputs will be political, that is, discussion among ministers. Being mindful that one cannot prescribe to ministers and that this phase will attract most public attention? Would a 'sherpa' type process prepare a political declaration? Ministerial roundtables?"

A.7 Jeffery et al. (2021) The Challenges of Assessing "Collective Progress" – Design Options for an effective Global Stocktake process under the UNFCCC

https://www.umweltbundesamt.de/publikationen/the-challenges-of-assessing-collective-progress

The paper discusses challenges in assessing collective progress by the GST, such as data gaps in the quantification and aggregation of emissions and the limited mandate to assess collective progress only. It finds that the UNFCCC process could maximise its effectiveness by including an explicit public appraisal of the inputs and by using the so-called performance distributions approach to perform collective assessments. It also points out the importance of benchmarks.

- "[...] the impulses from the GST process as a pacemaker must be strong enough to effectively stimulate national and subnational governance levels."
- "[...] the political phase of the GST needs to include a renewed political commitment. Parties need to reaffirm that they still honour the Paris Agreement and its goals and demonstrate their continued resolve to act upon them."
- "Indicators and benchmarks will be necessary in the GST as a means to assess collective progress."
- "One option for the GST to consider for increasing the number of indicators that could be used, is to establish a cut-off number of countries for which data is available and an assessment could still be performed."

- "The information for setting benchmarks is more readily available than that for the indicators themselves and will primarily come through the IPCC."
- "Ideally, the GST would also set sectoral benchmarks e.g. for energy, industrial processes and product use (IPPU), agriculture, forestry and other land use (AFOLU), or waste. Such benchmarks would allow policy makers on the national level to develop a more holistic perspective on their own mitigation activities. "
- "The GST should include an explicit public appraisal of the inputs, especially the transparency reports and technical reviews thereof."
- "For driving NDC Ambition the global research community should break down international benchmarks to the national level, discuss sector specific transformation challenges/barriers and highlight good practices to overcome them."

A.8 Beuermann et al. (2021): Maximising the impacts of the Global Stocktake: Options for design and implementation

https://ndc-aspects.eu/sites/default/files/2021-10/GST_Policy_Brief_fin.pdf

The policy brief applies the concept of the governance functions of international institutions and focuses on one thematic area of the GST, mitigation, only. It acknowledges the importance to link the GST outcomes of all three thematic areas (mitigation, adaptation and means of implementation) for strengthening collective climate ambition. The focus is on a sectoral approach and procedural fairness.

- "To ensure procedural fairness and boost transparency and accountability, equitable access should be guaranteed for developing country government delegations and different stakeholder groups. Equitable treatment of non-Party stakeholders' inputs and perspectives includes early communication of time frames and procedures to ensure that their inputs can be adequately considered in the GST-Technical Assessment and thereby feed into the GST-Consideration of Outputs."
- "To strengthen the follow-up of the GST outcomes, GST cycles should culminate in a high-level event and associated COP decision and/or declaration acknowledging the Paris Agreement's long-term goal, stating collective overall and collective sectoral climate ambition and committing to further action needed. This would strengthen the guidance and signal function of the GST, amplifying the messages for national policy agendas and indicating a reinforced political commitment of Parties to the Paris Agreement and its goals in the light of the latest available science. Such an event could highlight key outcomes of the GST process and involve the commitment by Parties to taking the outcomes into account in NDC updates and revisions. If it is not possible to include such commitments in a CMA decision, individual Parties could spell out such commitments in a separate political declaration. Likewise, in line with the increased focus of the UNFCCC process on non-Party actors, such actors could also be encouraged to publish a declaration acknowledging the GST outcomes and committing to increasing ambition where needed."
- "A sectoral approach could help to ensure that the expected outcomes of the Global Stocktake (GST) are achieved. A sectoral approach would help break down the rich base of information collected into more manageable pieces through which Parties could further align their policies with the Paris Agreement goals. While the Paris Agreement and the Katowice decision do not provide an explicit entry point for a sectoral approach, it could nevertheless be pursued under

several of the broadly formulated 'guiding questions' that are supposed to form the basis of the GST."

"Recommendations and roadmaps for how sectoral decarbonisation targets could be achieved could be the core of a detailed technical summary of available options and best practices, and the final CMA decision and/or political declaration should engage with and endorse these results."

A.9 Huang (2018) What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals? CCLR Vol. 12, No.3.

https://doi.org/10.21552/cclr/2018/3/8

Early (2018) paper on the GST including some considerations on the output component considered at that time.

- "The Bonn informal notes reveal Parties are considering a range of potential outputs for the global stocktake, from high-level events (options include a dedicated political ministerial segment, high-level ministerial dialogues or roundtables), a presidential statement or final report, a summary of key messages, a decision by the COP serving as meeting of the Parties to the Paris Agreement, or a formal declaration. A combination of the above is also possible. Given that the stated purpose of the outcome of the global stocktake is to 'inform Parties in updating and enhancing [...] their actions and support' and to influence the next round of NDCs, Parties will have to consider which outcome or combination of outcomes will best achieve these purposes."
- "The outcome of the global stocktake, however, should have significant gravity. (...) Such an event will require a host of resources and political capital that should be spent strategically on a process meant to be a regular and powerful driver to greater global action and support over time."

A.10 Submissions by Parties and observer organisations that address the process and outputs of the political phase of the global stocktake

https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx

There are some submissions that focus only on the technical dialogues, and not on the process and output of the political phase. These are not included in the following.

The OECD/IEA submission is a summary of the above covered report "Translating outputs to outcomes under the global stocktake of the Paris Agreement: Modalities to translate outputs to outcomes; potential enablers; leveraging political moments".

Party / stakeholder	Statements
African	No information on process of political phase
Group of	Focus on support/finance
Negotiators	GST output should inform work program on Global Goal of Adaptation

Table 2: Statements from submissions by Parties and observer organisations

Party / stakeholder	Statements
Statements on outputs	Outcomes must "address the long-term programmatic challenge related to the provision of climate finance to support the attainment of the goals of the Convention and the Paris Agreement;" Outcomes must include an analysis of the variety and form of financial instruments to fund developing countries; and Outcomes must provide the definition of climate finance, accounting for support, adequacy of support of climate action in line with 9.3 and 9.4 of the Paris Agreement" Adaptation outputs of the GST should also reinforce the work programme on GGA, where in the short-term the synthesis report or information being considered is aligned to the four key elements/dimensions of the GGA, namely: i. Planning; ii. Risk and Vulnerability; iii. Implementing of Actions; and iv. Finance for Adaptation. Statements on what the GST Outcome should lead to: Opportunities and options for international cooperation that should support universal access to electricity and clean cooking technologies in Africa, such as utility-scale solar energy deployment in Africa; Increased support to Africa's land-use sectors to enhance their sinks capacity and ecosystem goods and services, in order to support sustainable livelihood systems and to increase their capacity to contribute to the transition to net-zero. Scale-up support and deploy measures to address gaps in finance, technology and capacity-building for Africa/Developing countries to contribute their fair share of efforts to achieving the goals the Paris Agreement.
Columbia on behalf of AILAC	No information on process of political phase Focus on guidance for key sectoral systems Points to analysis regarding Article 6
Statements on outputs	Success of the GST has to be measured against its ability to provide Parties with concrete guidelines that both provide information and technical elements to empower them to adopt the measures they need, and also present a reference frame for Parties to understand each other's actions and ambitions in light of the collective goals GST must address transformations of the key systems highlighted by the IPCC, with a view to generate guidance relating to all of them as part of the GST Outcome, including: i. Energy, ii. Industry, iii. Urban & Infrastructure, iv. Land & Food Technical dialogues and GST outcome should provide guidance to Parties for the transformation of each of these key systems, such as the need to decarbonize electricity generation. Technical questions regarding technology and infrastructure rollout for generation, transmission, distribution and storage will vary significantly by country, but all countries would be advised to systematically approach these questions. Shifting energy use away from technologies that burn fossil fuels to electricity. Take up alternative energy sources and technologies, and set a route to reduce and ultimately eliminate fossil fuels. Bringing energy efficiency to industrial activity and moreover recognise the role of industrial processes within current and future national emissions. Guidance, benchmarks, global milestones for material substitution, product substitution, and product re-design Range of transportation options depends on infrastructure and investments in transport networks including road, rail, and non-motorized options. Urban form is a driver of transport demand. Role of buildings (for addressing energy demand). Help identifying and providing tools and fora to address challenges in forest and ecosystem management, cultivation of food and soil management, livestock, and diets, and ensure that links between resilience and emissions reduction fully permeate the land and food system approaches, and highlight these issues for policymakers Pointing to an analysi

Party / stakeholder	Statements
	It will be crucial that, as an outcome of the 2023 GST, an analysis to understand the global impact of the implementation of market instruments under article 6, and other international instruments, is commissioned to the IPCC. Based on this analysis, one of the results of GST2 (2028), and of subsequent GSTs, should be the recommendation on possible new limits and safeguards to guarantee that the instruments at a global level fulfil their ultimate purpose or, as relevant, a plan for the progressive reduction of use of international carbon markets as scope for global emissions reduces in line with the science of 1.5C
United States of America	No information on process of political phase Outputs should concentrate on long-term goals Outputs should capture the actions of various actors
Statements on outputs	General Statement: The operation of and outputs of the GST must capture both the collective progress made to date, and the urgent need to do more, faster. Operation modalities of the Global Stocktake and its Assessment Phase: Work under the Paris Agreement should turn into a mode of "ImplementationPlus": GST mandate aligns with both helping Parties to enhance implementation of existing goals and commitments, and strengthening or establishing commitments and goals where needed. Focus on the long-term goals in Article 2.1 and Article 7.1. as US thinks that the GST will be less diffuse and therefore more effective if it concentrates on these provisions. Highlighting opportunities to advance collective progress. Consideration of equity and best available science. Assessing collective progress needs capturing the actions of various actors as these all (together) are generating critical leadership for ambitious climate action. This includes actions of Parties Initiatives involving interested Parties and/or other stakeholders with increasing importance in driving sectoral action Specialized agencies or other multilateral fora (s (e.g., international aviation and international shipping) Non-party stakeholders
AOSIS	No information on process of political phase Outputs should explicitly address Loss and Damage Design of outputs and support for their implementation
Statements on outputs	Ensuring that the GST outputs address loss and damage is of utmost importance for AOSIS. Focus on redressing the disproportionate impacts of climate change on SIDS including through support for loss and damage and a just transition. Related to that, AOSIS list criteria relevant for considering how the outcome of the GST will address the needs of vulnerable countries. To strengthen the ability of SIDS to implement the GST recommendations or utilize the GST outcome in developing the next round of their NDCs, it would be important to ensure: Understandable format: Translate outputs into and simple, practical tools for utilization at the domestic level, identifying policies, methods and approaches for enhancing NDCs. Provision of support: To build domestic capacities for the implementation of GST outputs.
Pakistan on behalf of the group of G-77 and China	General, not detailed requirements on process of political phase

Party / stakeholder	Statements
Statements on the process	Sufficient regional representation of developing countries within GST activities is important. (Note: Not explicitly requested for political phase but for all GST activities) simple, effective, and efficient implementation of the agreed modalities under decision 19/CMA.1 would be important.
Statements on outputs	Taking best available science as one basis of the GST work requires that the policy-relevant insights of IPCC reports are reflected in the outputs of the Technical Assessment component, and in the final outcome of the GST itself. Information from regional reports of regional organizations may be relevant to the assessment of collective progress and be included in GST outputs. There should not be any imbalance in terms of focus on any thematic area. GST focus is on taking stock to assess collective progress. There is no individual Party focus (paragraph 14 of decision 19/CMA.1)
Bhutan	Process of the political phase must provide for thematic foci (cryosphere, mountainous regions) Output not only stock taking but forward looking
Statements on the process	Call for a dedicated space to discuss the associated risks of rising temperatures to the cryosphere.
Statements on outputs	Outcome of the GST must take into account the consequences of rising temperature in mountainous regions to urgently drive emission reductions within this decade. GST must provide a clear picture of the Paris Agreement's ambition mechanism to achieve the 1.5°C limit. The outcome of the GST should not be only limited to taking stock of actions, but it should also provide guidance to drive action and ambition across all thematic areas
High-level Champions	No information on process of political phase Recommendation on design of outputs of the political phase Consider Regional, diverse and equity-based approaches
Statements on outputs	Speak clearly to domestic policy makers. Provide indications of what policy decisions, regulations, market and non-market mechanisms can enable, and which barriers need to be removed to speed up decarbonization, increase adaptive capacity and finance the transition. Should be forward-looking and practical, offering concrete solutions for the way forward, including by looking through a sectoral lens. To be successful and useful, the GST must be inclusive of all voices and generate clear signals, i.e., demonstrate the effective actions taken on the ground and the transformations they create in the real world in ways that are informative and actionable to decision-makers. GST should explore regional approaches, be sensitive to specific regional contexts and the diversity of approaches towards the common goal of limiting global warming to 1.5 degrees and building resilience. Analysis of the progress made and what needs to be done to ensure a just and equitable response to the climate emergency. Identify gaps, particularly finance and capacity gaps.
Zambia on behalf of the African Group of Negotiators	Views on the process and outputs of the political phase

Party / stakeholder	Statements
Statements on the process	Participation in all GST processes should be balanced and representative, reflecting demographic realities in the representation of developed and developing countries. It has to be ensured that parallel processes are mutually reinforcing and not duplicative. Appropriate balance in representation of developing and developed countries non-state actors in the Technical Dialogues and other GST processes.
Statements on outputs	an implementation gap assessment as outcome of the GST acknowledgement of Africa's special circumstances and needs, and a balanced outcome which is not mitigation-centric. GST should revisit the question of what constitutes a "fair and ambitious" contribution (criteria)
India on behalf of the LMDC	No information explicitly on the process of the political phase Outputs must cover gaps analysis, apply benchmarks and indicators
Statements on the process	GST must be comprehensive, facilitative inclusive, robust assessment to ensure this, aggregate assessment of progress has to be made based in Equity, of all climate actions i.e. mitigation, adaptation, means of implementation and support (in terms of finance, technology transfer and development, and capacity building), and addressing the consequences of loss and damage and response measures and just transition of the workforce, in the context of impact of implementation of response measures call for an inventive approach that ensures more interaction between Experts, Parties and stakeholders, statement: adequate time should be given to stocktaking instead of presentations / questions and answers
Statements on outputs	2023 GST must assess the gaps in all Pre 2020 actions and commitments, including the means of implementation and support provided. GST may pose as the frontline, lending considerable focus on Adaptation and Means of Implementation and Support, consequences of Loss & Damage and Response Measures. Co-facilitators must develop benchmarks and indicators to ensure that Equity is not only deemed to have been considered but is actually operationalized from the commencement till the outcome of the GST; whatever form the output may take
Senegal	Effective engagement in all GST processes No information on outputs of the political phase
Statements on the process	Effective engagement of non-Party stakeholders throughout the GST process to strengthen the ownership of the process. Lessons from past practices undertaken in regional meetings, the Technical Examination Process and the work of climate champions to facilitate engagement of stakeholders
European Union	No information on process of political phase General information on output content with clear recommendation on format
Statements on outputs	GST should both contribute to and benefit from other processes under the PA and the UNFCCC, particularly those that generate additional benchmarks for action such as the mitigation work programme, work programme on the global goal on adaptation and the ad hoc work programme on the new collective quantified finance goal. Outcome of the GST will have to provide an important signal to the wider landscape of relevant actors to advance ambition and implementation and steer real world action. Format of the outcome of the GST should be a CMA decision fully endorsing the results of the GST that also includes a technical annex which could include a summary of key recommendations across the thematic areas of the GST

Party / stakeholder	Statements
Switzerland on behalf of the Envi- ronmental Integrity Group	No information on process of political phase Some information on outputs generally or on outputs of the technical dialogue
Statements on outputs	Append one or more technical annexes to the output of the Technical Dialogue. Such technical annexes could list specific opportunities for climate action. Applying a sectoral or thematic lens is a good approach to guarantee that the results of the GST can easily be taken into account at domestic level. The GST can also shed light on those hard to abate sectors, such as aviation and shipping, were we need to mobilize to reduce emissions fast. GST process should be informed by the best available science
CDP worldwide	Some information on process Few information on outputs
Statements on the process	The GST should provide a common roadmap to both Parties and NPS for enhancing the implementation of climate actions, including an indication of pathways for reporting. The link between the GST and the NDCs' ambition progression should be clearly emphasized throughout the GST cycle.
Statements on outputs Source: Submissio	NPS should be specifically highlighted to ensure outputs are directly applicable, allowing them to update commitments in line with findings, raising the ambition of all actors. ns by Parties and observer organisations,

https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx.

The submission by the IGST (Independent Global Stocktake) comprises links to a number of different publications and therefore is not summarized in a table format. Selected publications listed in this submission can be found below.

A.11 IGST report by Dagnet et al (2020): A Vision for a Robust Global Stocktake

https://www.climateworks.org/wp-content/uploads/2020/09/iGST_A-Vision-for-a-Robust-Global-Stocktake_FINAL-1.pdf

"to fulfill the objectives and functions of the GST it is important to establish processes to ensure that the outputs (especially of the third component) carry political weight and are perceived as legitimate."

Suggestions to make the outputs politically impactful:

- Spread the high-level events throughout the two weeks of the COP:
 - Organize a high-level dialogue between Parties and stakeholders to discuss the implications of the findings of the technical assessment.
 - Discuss each Synthesis Report produced from the technical dialogue in a dedicated highlevel event, with loss and damage and response measures being considered accordingly." [Note: The submission says 'each synthesis report'. However, there is only one synthesis report of the technical dialogue, and several summary reports. We assume that 'each summary report' is meant.]

- Livestream the high-level events for transparency.
- Ensure high-level participation: To ensure that the GST's outputs are taken up at the national level and translated into concrete ambition enhancement, it will be important to secure the participation of heads of state and government and ministers from all countries at the COP where the GST's outputs are considered.
- Heads of State and Government and ministers could be pressed to give a strong renewed political signal of commitment to the Paris Agreement, including pledges to take up the output of the GST to guide the revision of their NDCs. The COP presidencies would need to take on diplomatic outreach early on to make this happen.

Format for the outputs:

- A formal CMA decision fully endorsing all the outputs of the GST; urging Parties to take all GST outputs into consideration when revising their NDCs; and inviting the work of the IPCC to inform future GSTs and fill gaps identified during the current GST.
- A declaration by stakeholders (with or without Parties) as an output of the high-level dialogue events described above.
- Detailed technical summary reports from the high-level events produced by the secretariat with the assistance of the SB chairs. These should capture key messages and recommendations of the high-level thematic events; identify options; and highlight best practices, lessons learnt, and recommendations.
- A final set of high-level recommendations and summary of key political messages, thematically structured, which could include recommendations for strengthening actions and scaling up support, could deliver strong messages to attract the public scrutiny that will effectively influence national and subnational agendas."

A.12 IGST report by Obergassel et al. (2019) Success Factors for the Global Stocktake under the Paris Agreement

https://www.researchgate.net/publication/342590787 Success Factors for the Global Stockta ke under the Paris Agreement

Final outputs of the GST process should include:

- High-level political messages on the need to enhance efforts contained in a summary report by the GST co-chairs;
- A detailed technical summary of available options, best practice, and recommendations.

To give the most possible legal and political weight to the outcome, the final output of the process should be a CMA decision

- ▶ re-affirming Parties commitment to achieving the objectives of the Paris Agreement;
- urging Parties to urgently strengthen their efforts in all areas of adaptation, mitigation and finance;
- fully endorsing the high-level political messages and detailed recommendations emanating from the GST;

 urging Parties to fully take the results of the GST into account in the revision of their NDCs. The decision could also request the IPCC and the subsidiary bodies to undertake further work to help inform the next GST, in particular on knowledge gaps that have been identified.